

# Service Manual

UHF-PSB-FM-AM 4-BAND  
PORTABLE RADIO

Radio

RF-1115/©



## ■ SPECIFICATIONS

Frequency Range:	UHF 450~512 MHz
	PSB 136~174 MHz
	FM 88~108 MHz
	AM 525~1605 kHz
Intermediate Frequency:	FM (UHF, PSB) 10.7 MHz
	AM 455 kHz
Sensitivity:	UHF 2 $\mu$ V for S/N 6 db
	PSB 2 $\mu$ V for S/N 6 db
	FM 1 $\mu$ V for S/N 6 db
	AM 30 $\mu$ V/m for 50mW Output
Power Source:	AC 120V 60 Hz
	6V (Four "C" Size Flashlight

Batteries	(Panasonic UM-2 or equivalent)
Power Consumption:	7W at 120V (AC Only)
Speaker:	10 cm (4") PM Dynamic Speaker
Dimensions:	10 $\frac{1}{16}$ "(Wide) x 6 $\frac{13}{16}$ "(High) x 3 $\frac{3}{8}$ "(Deep) (273 x 173 x 86 mm)
Weight:	5 lb. 1 oz. (2.27 kg) with batteries
Impedance:	Speaker ..... 16 $\Omega$ Earphone Jack ..... 8 $\Omega$ Recording Out Jack ..... 20k $\Omega$

Weights and dimensions shown are approximate.  
(Les poids et dimensions mentionnés sont approximatifs.)  
Specifications are subject to change without notice for further improvement.

# Panasonic®

## ■ TO REMOVE CHASSIS

1. Open the battery cover.
2. Remove the six (6) screws (nos. 1~6) for the cabinet back cover, as shown in fig. 1.
3. Remove cabinet back cover.
4. Pull out sockets from chassis.
5. Remove the three (3) red screws (nos. 1~3) for the chassis, as shown in fig. 2.
6. Unsolder lead wire (for the speaker) from chassis.
7. To remove chassis completely unsolder lead wires from cabinet.
8. To reassemble, reverse the above procedure.

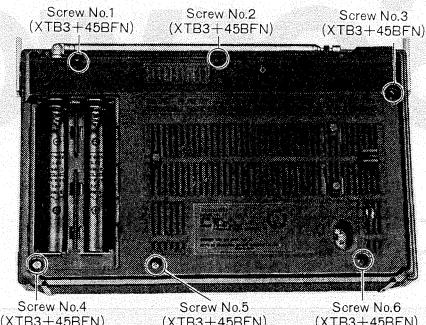


Fig. 1

## ■ TO REMOVE DIAL DRIVE ASSEMBLY

1. Remove chassis from cabinet. (Refer to chassis removal instruction.)
2. Turn tuning shaft fulley counter-clockwise.
3. Remove band indicator and indicating plate, as shown in fig. 3.
4. Remove the two (2) screws (nos. 2 & 3) for switch, as shown in fig. 3.
5. Remove the four (4) nuts (nos. 1, 4, 5 & 6) for volume, as shown in fig. 3.
6. Remove the six (6) screws (nos. 2, 3, 4, 5, 8 & 10) for dial drive assembly, as shown in fig. 4.
7. Loosen the two (2) screws (nos. 7 & 9) for UHF tuner, as shown in fig. 4.
8. Remove dial drive assembly from chassis.
9. To reassemble, reverse the above procedure and note the following:
  1. Set variable capacitors to maximum capacity.
  2. Turn tuning shaft fulley counter-clockwise.

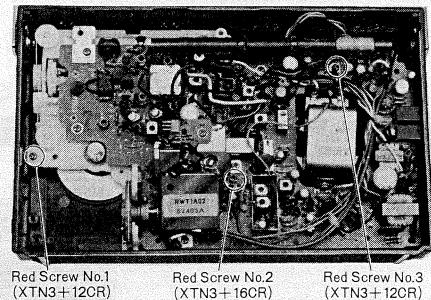


Fig. 2

## ■ DIAL SCALE INSTALLATION GUIDE

1. Turn tuning shaft fulley counter-clockwise.
2. Loosen the two (2) screws (nos. 1 & 6) for the gear, as shown in fig. 4.
3. Remove spring for the rollers, as shown in fig. 5.
4. Insert the protuberance of gear in the catch no. 1 of roller no. 2, as shown in fig. 6.
5. Turn the gear one turn in the direction of arrow, then attach the stopper to the catch no. 2 on the roller no. 2, as shown in fig. 6.
6. Set roller no. 1 at the position as shown in fig. 5.
7. Wind the dial scale onto the roller No. 2, and set it to the dial drive assembly.
8. Set spring at the position as shown in fig. 5.
9. Hook the dial scale on the boss of the roller no. 1, as shown in fig. 5.
10. Confirm that the stopper of the gear should be located at the position, as shown in fig. 5.
11. Set start point of dial scale at the position, as shown in fig. 7.
12. Tighten the two (2) screws (nos. 1 & 6) for the gear, as shown in fig. 4.

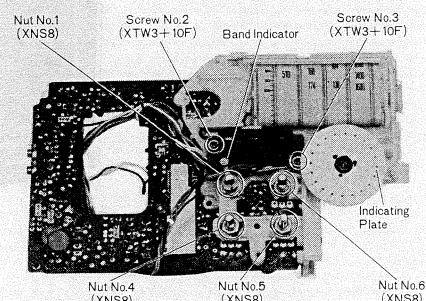


Fig. 3

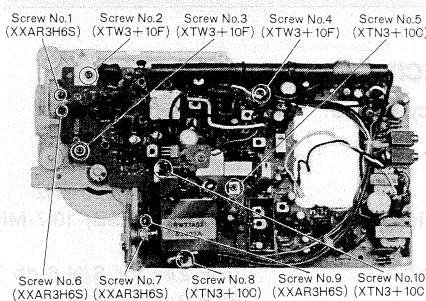


Fig. 4

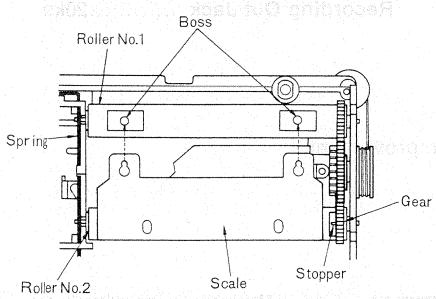


Fig. 5

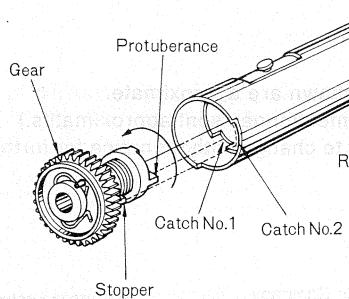
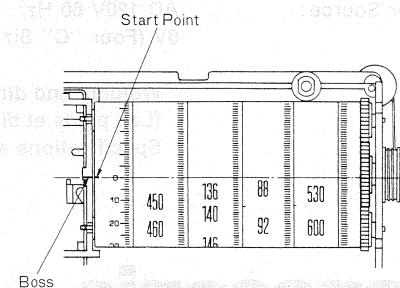


Fig. 6



## DIAL CORD INSTALLATION GUIDE

- Remove dial drive assembly. (Refer to dial assembly removal instruction.)
- Remove dial drum stopper, as shown in fig. 8.
- Set each dial drum at the position, as shown in fig. 8.
- Insert awl into the holes for fixing dial drums, as shown in fig. 8.
- Cord length is 140 cm (55").
- Arrows (1~13) indicate correct order and direction of cord installation.
- Cement cord ends.
- Mount dial drive assembly to chassis. (Refer to dial drive assembly removal instruction.)
- Turn tuning shaft fully counter-clockwise.
- Mount dial drum stopper at the position, as shown in fig. 8.
- Set start point of dial scale to boss of dial drive assembly. (Refer to dial scale installation guide.)

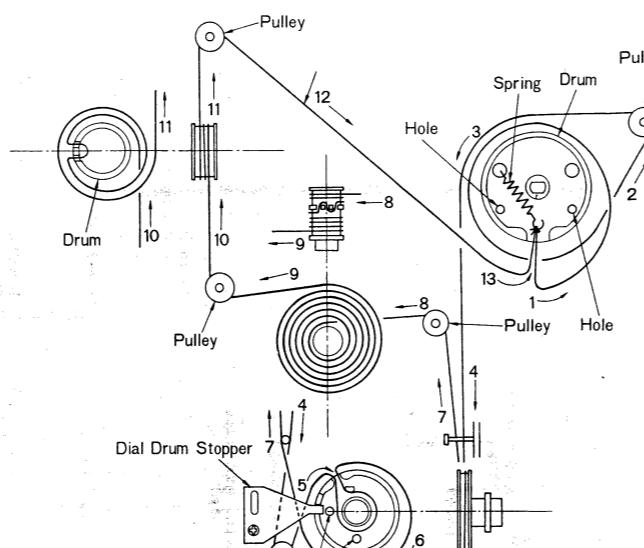


Fig. 8

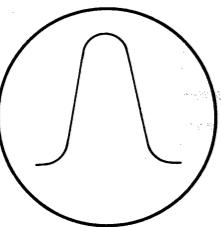


Fig. 9

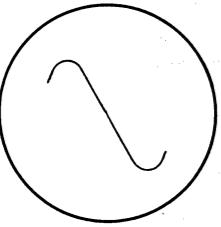


Fig. 10

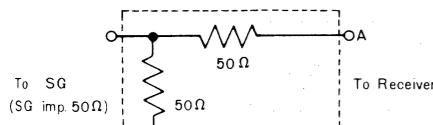
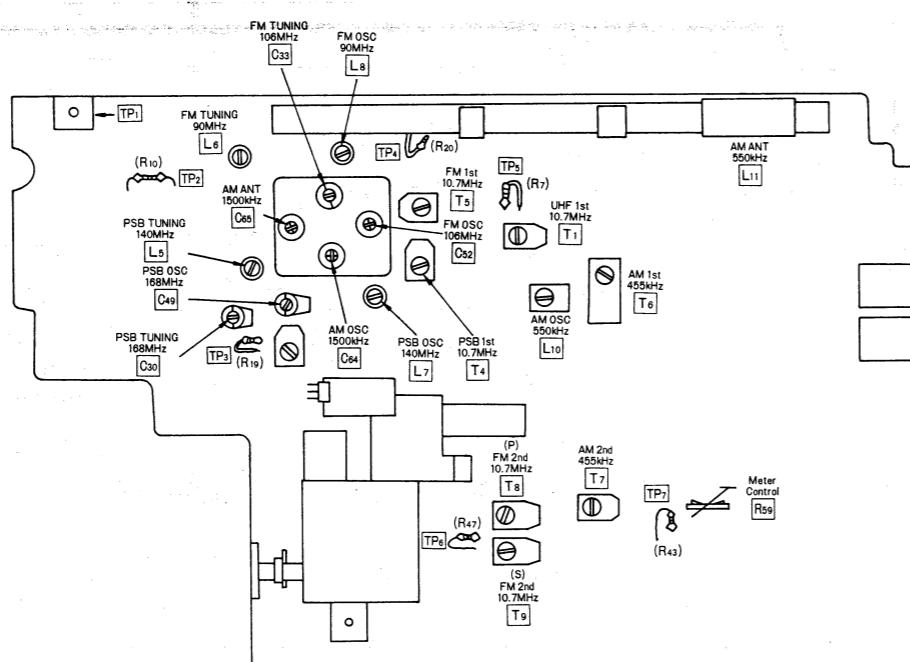


Fig. 11 FM Dummy Antenna

## ALIGNMENT POINT



AM

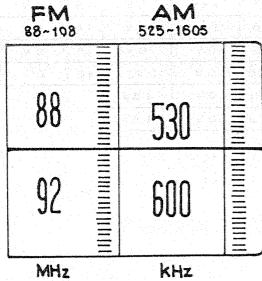


Fig. 13 (550 kHz)

FM

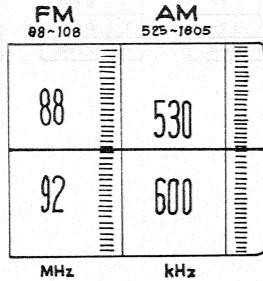


Fig. 15 (90 MHz)

PSB

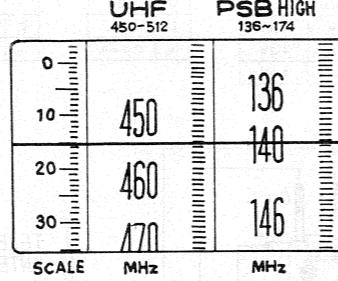


Fig. 17 (140 MHz)

## ■ CHASSIS PARTS LOCATIONS

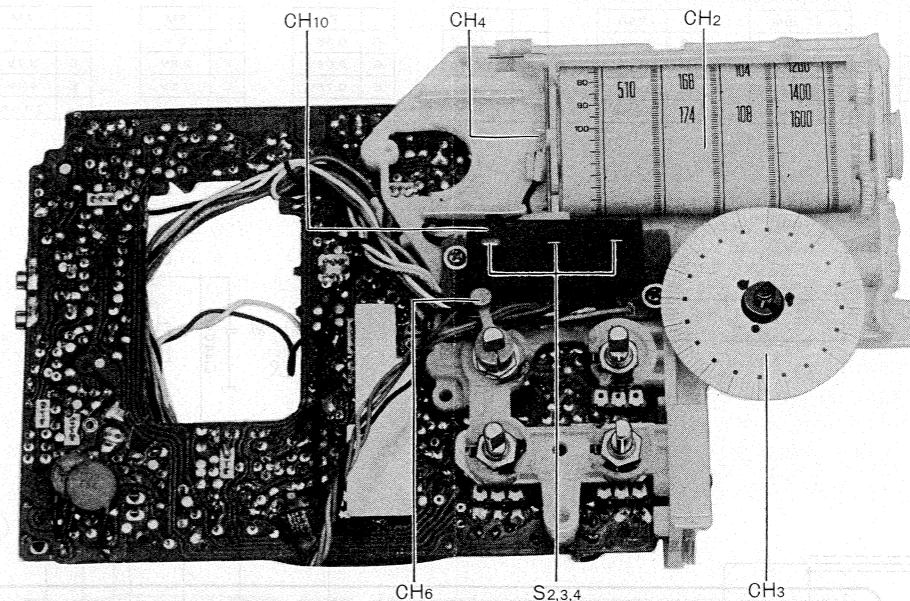


Fig. 20

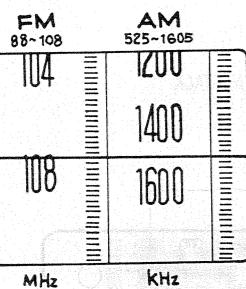


Fig. 14 (1500 kHz)

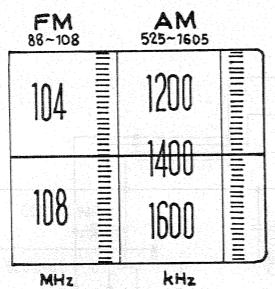


Fig. 16 (106 MHz)

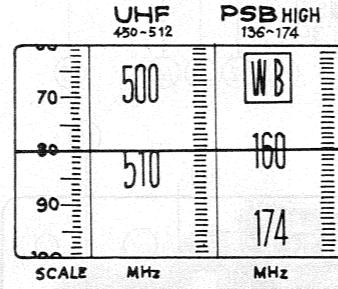


Fig. 18 (168 MHz)

## ■ CABINET PARTS LOCATION

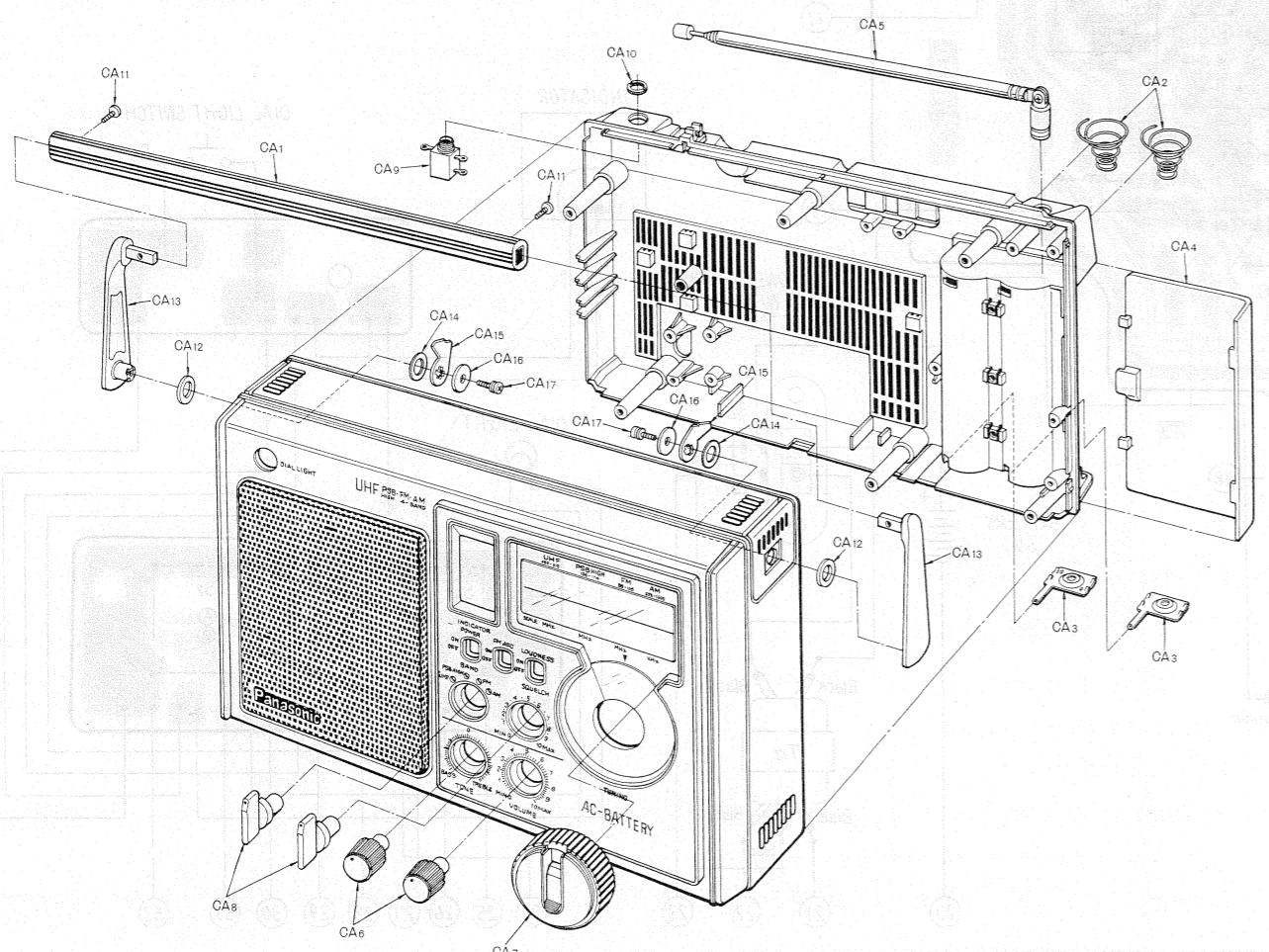
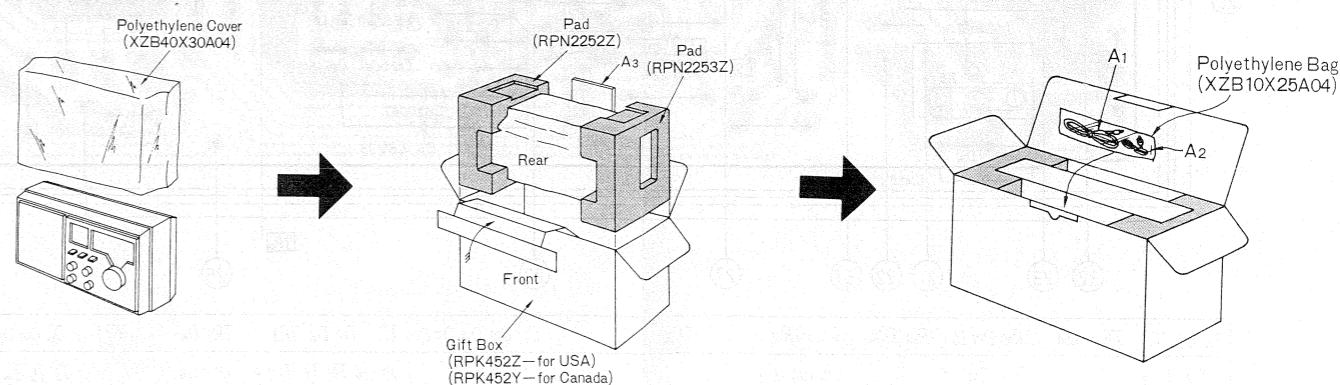


Fig. 19

A5

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## ■ PACKING MATERIALS AND ACCESSORIES



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A6

# REPLACEMENT PARTS LIST ..... Model RF-1115

(RD7609-1305)

**NOTES:**

1. Part numbers are indicated on most mechanical parts.  
Please use this part number for parts orders.
2. Components identified by shaded area have special characteristic important for safety. When replacing any of these components use only manufacturer's specified parts.
3. Part numbers shown in bold letters are service standard parts and may differ from production parts.
4. The O mark is used by the manufacturing plant only.

Ref. No.	Part No.	Part Name & Description	Per Set	Remarks
<b>TUNER</b>				
	RWT1A02	UHF TUNER	1	O

INTEGRATED CIRCUIT, TRANSISTORS AND DIODES				
IC TR3,4,6,7,8	RVIUPC1018GE 2SA838	IC, FM/AM IF Amp., AM Converter Transistor(Ge), UHF IF Amp., PSB RF Amp., FM RF Amp., FM Converter, FM IF Amp.	1 5	
TR5	2SC1674	Transistor(Si), PSB Converter Transistor(Si), DC, Squelch Amp.	1	
TR9,11	2SA564	Transistor(Si), Meter Amp.	2	
TR10	2SC828	Transistor(Si), AF Amp.	1	
TR12,14	2SB173	Transistor(Si), AF Amp.	2	
TR13	2SC945	Transistor(Si), Power Amp.	1	
TR15,16	2SC1383 OA90	Transistor(Si), Power Amp., Diode(Ge), PSB AGC, PSB-FM AGC AM Detector & AGC, FM AGC, Rect.	2 6	
D2,4,7,10,11, 12				
D3	RVDSD113	Diode(Si), FM AFC	1	
D5	RVDMZ204C	Diode(Si), Operation Compensator	1	
D6,17	RVDVD1250L	Diode(Si), Operation Compensator, Rectifier	2	O
D8,9	2-OA90	Diode(Ge), FM Detector	1Pair	
D13	RVDVD1250M	Diode(Si), Operation Compensator	1	
D14	RVDVD1150M	Diode(Si), Power Operation Compensator	1	
D15,16	RVD10E1LF	Diode(Si), Rectifier	2	

CERAMIC FILTERS, COILS AND TRANSFORMERS				
CF1,2	RVF107MFB	Ceramic Filter	2	
L5	RLD4N35-O	Coil, PSB Tuning	1	
L6	RLD4N30	Coil, FM Tuning	1	
L7	RLO4N92-O	Oscillator Coil, PSB	1	O
L8	RLO4N54	Oscillator Coil, FM	1	
L10	RLO2M15-K	Oscillator Coil, AM	1	O
L11	RLF2F151-O	Antenna Coil, AM	1	O
T1,4,5	RLI4M101	IFT, UHF, PSB & FM	3	
T2,3	RLI4M103	IFT, PSB & FM	2	
T6	RLI7W105-Z	IFT, AM 1st	1	

Ref. No.	Part No.	Part Name & Description	Per Set	Remarks
T7	RLI2M402	IFT, AM 2nd	1	
T8	RLI4M504	IFT, FM 2nd(Primary)	1	
T9	RLI4M507	IFT, FM 2nd(Secondary)	1	
T10	RLT3F30-V	Input Transformer, $P=1K\Omega:S=700\Omega$	1	
T11	RLT2G22-W	Output Transformer, $P=70\Omega:S=120\Omega$	1	O
T12	RLT5J311A-W	Power Transformer	1	O

<b>VARIABLE RESISTORS</b>				
R60,73	EVH5XA026B23	2KΩ(B), Squelch & Tone Control	1	
R67	EVH5XA026D54	50KΩ(D), Volume Control	1	
R59	EVLTOAA00B23	2KΩ(B), Preset, Meter Control	1	O

<b>VARIABLE CAPACITORS</b>				
C31,34,48,51, 62,63	RCV2X4216TL	Tuning Capacitor, W/Trimmer Capacitor(C33,52,64,65)	1	
C30,49	ECV1ZW10X32	Trimmer Capacitor	2	O

<b>COMPONENT COMBINATIONS</b>				
Z1	RXABPF17402I	Component Combination, Coils & Capacitors	1	
Z2	RXABPF10801H	Component Combination, Coils & Capacitors	1	
Z3	RXAF103P22HD	Component Combination, $0.01\mu F \times 2$	1	

<b>SPEAKER</b>				
SP	EAS10P57S	Speaker, Imp. $16\Omega$ , 10cm(4"), PM Dynamic	1	

<b>SWITCHES</b>				
S1-1~S1-6 S2,3,4	RSR4F01Z-H RSTX001Z-M	Switch, Band Switch, Power, FM AFC & Loudness	1 1	O

<b>RESISTORS</b>				
R6	ERD25TJ470	47Ω, $\frac{1}{2}$ Watt, $\pm 5\%$ , Carbon	1	
R7	ERD25TJ681	680Ω, $\frac{1}{2}$ Watt, $\pm 5\%$ , Carbon	1	
R8	ERD25TJ104	100KΩ, $\frac{1}{2}$ Watt, $\pm 5\%$ , Carbon	1	
R9	ERD25TJ470	47Ω, $\frac{1}{2}$ Watt, $\pm 5\%$ , Carbon	1	
R10	ERD25TJ103	10KΩ, $\frac{1}{2}$ Watt, $\pm 5\%$ , Carbon	1	

Ref. No.	Part No.	Part Name & Description	Per Set	Remarks
R11	ERD25TJ332	3.3KΩ, ½Watt, ±5%, Carbon	1	
R12	ERD25TJ332	3.3KΩ, ½Watt, ±5%, Carbon	1	
R13	ERD25TJ102	1KΩ, ½Watt, ±5%, Carbon	1	
R14	ERD25TJ102	1KΩ, ½Watt, ±5%, Carbon	1	
R15	ERD25TJ331	330Ω, ½Watt, ±5%, Carbon	1	
R16	ERD25TJ471	470Ω, ½Watt, ±5%, Carbon	1	
R17	ERD25TJ470	47Ω, ½Watt, ±5%, Carbon	1	
R18	ERD25TJ470	47Ω, ½Watt, ±5%, Carbon	1	
R19	ERD25TJ152	1.5KΩ, ½Watt, ±5%, Carbon	1	
R20	ERD25TJ681	680Ω, ½Watt, ±5%, Carbon	1	
R21	ERD25TJ224	220KΩ, ½Watt, ±5%, Carbon	1	
R22	ERD25TJ334	330KΩ, ½Watt, ±5%, Carbon	1	
R24	ERD25TJ680	68Ω, ½Watt, ±5%, Carbon	1	
R25	ERD25TJ470	47Ω, ½Watt, ±5%, Carbon	1	
R26	ERD25TJ104	100KΩ, ½Watt, ±5%, Carbon	1	
R27	ERD25TJ470	47Ω, ½Watt, ±5%, Carbon	1	
R28	ERD25TJ220	22Ω, ½Watt, ±5%, Carbon	1	
R29	ERD25TJ470	47Ω, ½Watt, ±5%, Carbon	1	
R30	ERD25TJ103	10KΩ, ½Watt, ±5%, Carbon	1	
R31	ERD25TJ331	330Ω, ½Watt, ±5%, Carbon	1	
R32	ERD25TJ224	220KΩ, ½Watt, ±5%, Carbon	1	
R33	ERD25TJ331	330Ω, ½Watt, ±5%, Carbon	1	
R34	ERD25TJ682	6.8KΩ, ½Watt, ±5%, Carbon	1	
R35	ERD25TJ472	4.7KΩ, ½Watt, ±5%, Carbon	1	
R36	ERD25TJ150	15Ω, ½Watt, ±5%, Carbon	1	
R37	ERD25TJ470	47Ω, ½Watt, ±5%, Carbon	1	
R38	ERD25TJ103	10KΩ, ½Watt, ±5%, Carbon	1	
R39	ERD25TJ122	1.2KΩ, ½Watt, ±5%, Carbon	1	
R40	ERD25TJ470	47Ω, ½Watt, ±5%, Carbon	1	
R42	ERD25TJ470	47Ω, ½Watt, ±5%, Carbon	1	
R43	ERD25TJ103	10KΩ, ½Watt, ±5%, Carbon	1	
R44	ERD25TJ332	3.3KΩ, ½Watt, ±5%, Carbon	1	
R45	ERD25TJ102	1KΩ, ½Watt, ±5%, Carbon	1	
R46	ERD25TJ102	1KΩ, ½Watt, ±5%, Carbon	1	
R47	ERD25TJ102	1KΩ, ½Watt, ±5%, Carbon	1	
R48	ERD25TJ104	100KΩ, ½Watt, ±5%, Carbon	1	
R49	ERD25TJ102	1KΩ, ½Watt, ±5%, Carbon	1	
R50	ERD25TJ102	1KΩ, ½Watt, ±5%, Carbon	1	
R51	ERD25TJ153	15KΩ, ½Watt, ±5%, Carbon	1	
R52	ERD25TJ223	22KΩ, ½Watt, ±5%, Carbon	1	
R53	ERD25TJ222	2.2KΩ, ½Watt, ±5%, Carbon	1	
R54	ERD25TJ154	150KΩ, ½Watt, ±5%, Carbon	1	
R55	ERD25TJ222	2.2KΩ, ½Watt, ±5%, Carbon	1	
R56	ERD25TJ823	82KΩ, ½Watt, ±5%, Carbon	1	
R57	ERD25TJ221	220Ω, ½Watt, ±5%, Carbon	1	
R61	ERD25TJ331	330Ω, ½Watt, ±5%, Carbon	1	
R62	ERD25TJ272	2.7KΩ, ½Watt, ±5%, Carbon	1	
R64	ERD25TJ334	330KΩ, ½Watt, ±5%, Carbon	1	
R65	ERD25TJ221	220Ω, ½Watt, ±5%, Carbon	1	
R66	ERD25TJ152	1.5KΩ, ½Watt, ±5%, Carbon	1	
R68	ERD25TJ103	10KΩ, ½Watt, ±5%, Carbon	1	
R69	ERD25TJ223	22KΩ, ½Watt, ±5%, Carbon	1	
R70	ERD25TJ824	820KΩ, ½Watt, ±5%, Carbon	1	
R71	ERD25TJ222	2.2KΩ, ½Watt, ±5%, Carbon	1	
R72	ERD25TJ330	33Ω, ½Watt, ±5%, Carbon	1	
R74	ERD25TJ153	15KΩ, ½Watt, ±5%, Carbon	1	
R75	ERD25TJ330	33Ω, ½Watt, ±5%, Carbon	1	

Ref. No.	Part No.	Part Name & Description	Per Set	Remarks
R76	ERD25TJ151	150Ω, ½Watt, ±5%, Carbon	1	
R77	ERD25TJ220	22Ω, ½Watt, ±5%, Carbon	1	
R78	ERD25TJ471	470Ω, ½Watt, ±5%, Carbon	1	
R79	ERD25TJ333	33KΩ, ½Watt, ±5%, Carbon	1	
R80	ERX1ANJR47	0.47Ω, 1Watt, ±5%, Metal	1	
R81	ERD25TJ473	47KΩ, ½Watt, ±5%, Carbon	1	
R82	ERX2ANJ100	10Ω, 2Watt, ±5%, Metal	1	
R83	ERD25TJ470	47Ω, ½Watt, ±5%, Carbon	1	
R84	ERD25TJ102	1KΩ, ½Watt, ±5%, Carbon	1	
R85	ERD25TJ223	22KΩ, ½Watt, ±5%, Carbon	1	
R86	ERD25TJ472	4.7KΩ, ½Watt, ±5%, Carbon	1	
R87	ERD25TJ681	680Ω, ½Watt, ±5%, Carbon	1	
R88	ERD25TJ823	82KΩ, ½Watt, ±5%, Carbon	1	
R89	ERD25TJ122	1.2KΩ, ½Watt, ±5%, Carbon	1	
R92	ERD25TJ470	47Ω, ½Watt, ±5%, Carbon	1	
R94	ERD25TJ223	22KΩ, ½Watt, ±5%, Carbon	1	
R95	ERD25TJ472	4.7KΩ, ½Watt, ±5%, Carbon	1	
R96	ERD25TJ470	47Ω, ½Watt, ±5%, Carbon	1	
R98	ERD25TJ471	470Ω, ½Watt, ±5%, Carbon	1	
R99	ERD25TJ680	68Ω, ½Watt, ±5%, Carbon	1	
R100	ERD25TJ470	47Ω, ½Watt, ±5%, Carbon	1	
R101	ERD25TJ222	2.2KΩ, ½Watt, ±5%, Carbon	1	
R110	ERD25TJ390	39Ω, ½Watt, ±5%, Carbon	1	
R111	ERD25TJ100	10Ω, ½Watt, ±5%, Carbon	1	

**CAPACITORS**

C19	ECQG05333MZ	0.033μF, 50WV,±20%	Polyester	1		
C20	ECKD1H102PF	0.001μF, 50WV,±10%	Ceramic	1		
C21	ECKE1H103MD	0.01μF, 50WV,±20%	Ceramic	1		
C22	ECKD1H102PF	0.001μF, 50WV,±10%	Ceramic	1		
C23	ECKE1H103PF	0.01μF, 50WV,±10%	Ceramic	1		
C24	ECKE1H103PF	0.01μF, 50WV,±10%	Ceramic	1		
C25	ECKE1H103PF	0.01μF, 50WV,±10%	Ceramic	1		
C26	ECKE1H103MD	0.01μF, 50WV,±20%	Ceramic	1		
C27	ECKE1H102MD	0.001μF, 50WV,±20%	Ceramic	1		
C28	ECKD1H102PF	0.001μF, 50WV,±10%	Ceramic	1		
C29	ECKD1H102PF	0.001μF, 50WV,±10%	Ceramic	1		
C32	ECCD1H100KC	10PF, 50WV,±10%	Ceramic	1		
C35	ECCD1H180KC	18PF, 50WV,±10%	Ceramic	1		
C36	ECCD1H040C	4PF, 50WV,±0.25PF	Ceramic	1		
C37	ECCD1H3R5C	3.5PF, 50WV,±0.25PF	Ceramic	1		
C38	ECKE1H103PF	0.01μF, 50WV,±10%	Ceramic	1		
C39	ECKE1H103PF	0.01μF, 50WV,±10%	Ceramic	1		
C40	ECCD1H220KC	22PF, 50WV,±10%	Ceramic	1		
C41	ECCD1H330KC	33PF, 50WV,±10%	Ceramic	1		
C42	ECCD1H050CC	5PF, 50WV,±0.25PF	Ceramic	1		
C43	ECKE1H223PF	0.022μF, 50WV,±10%	Ceramic	1		
C44	ECCD1H070DC	7PF, 50WV,±0.5PF	Ceramic	1		
C45	ECKE1H103PF	0.01μF, 50WV,±10%	Ceramic	1		
C46	ECCD1H120KC	12PF, 50WV,±10%	Ceramic	1		
C50	ECCD1H030C	3PF, 50WV,±0.25PF	Ceramic	1		
C54	ECKD1H102PF	0.001μF, 50WV,±10%	Ceramic	1		
C55	ECKD1H102PF	0.001μF, 50WV,±10%	Ceramic	1		
C56	ECEA10V1000	1000μF, 10WV	Electrolytic	1		

Ref. No.	Part No.	Part Name & Description	Per Set	Remarks
C57	ECEA50V1B	1 $\mu$ F, 50WV, Electrolytic	1	
C58	ECKT1H103MD	0.01 $\mu$ F, 50WV, $\pm 20\%$ , Ceramic	1	
C60	ECCD1H100KC	10PF, 50WV, $\pm 10\%$ , Ceramic	1	
C66	ECKT1H103MD	0.01 $\mu$ F, 50WV, $\pm 20\%$ , Ceramic	1	
C67	<b>ECEA10V100</b>	100 $\mu$ F, 10WV, Electrolytic	1	
C68	ECQSD1301JZ	300PF, 125WV, $\pm 5\%$ , Styrol	1	
C69	ECQG0533SMZ	0.033 $\mu$ F, 50WV, $\pm 20\%$ , Polyester	1	
C70	ECEA16V10B	10 $\mu$ F, 16WV, Electrolytic	1	
C71	ECEA6V47B	47 $\mu$ F, 6.3WV, Electrolytic	1	
C72	ECKE1H223MD	0.022 $\mu$ F, 50WV, $\pm 20\%$ , Ceramic	1	
C73	ECKE1H223MD	0.022 $\mu$ F, 50WV, $\pm 20\%$ , Ceramic	1	
C74	ECCD1H101K	100PF, 50WV, $\pm 10\%$ , Ceramic	1	
C75	ECKE1H103MD	0.01 $\mu$ F, 50WV, $\pm 20\%$ , Ceramic	1	
C76	ECEA6V47B	47 $\mu$ F, 6.3WV, Electrolytic	1	
C77	ECKT1H103MD	0.01 $\mu$ F, 50WV, $\pm 20\%$ , Ceramic	1	
C78	ECKE1H103MD	0.01 $\mu$ F, 50WV, $\pm 20\%$ , Ceramic	1	
C79	ECFVD333MDY	0.033 $\mu$ F, 25WV, $\pm 20\%$ , Semi-Conductor	1	
C80	<b>ECEA50ZR22</b>	0.22 $\mu$ F, 50WV, Electrolytic	1	
C81	<b>ECEA50ZR22</b>	0.22 $\mu$ F, 50WV, Electrolytic	1	
C82	ECEA50V1B	1 $\mu$ F, 50WV, Electrolytic	1	
C83	<b>ECEA50V1</b>	1 $\mu$ F, 50WV, Electrolytic	1	
C84	ECKE1H103MD	0.01 $\mu$ F, 50WV, $\pm 20\%$ , Ceramic	1	
C85	ECKE1H103MD	0.01 $\mu$ F, 50WV, $\pm 20\%$ , Ceramic	1	
C87	ECEA50V1B	1 $\mu$ F, 50WV, Electrolytic	1	
C88	ECFTD333MDY	0.033 $\mu$ F, 25WV, $\pm 20\%$ , Semi-Conductor	1	
C89	ECKE1H103MD	0.01 $\mu$ F, 50WV, $\pm 20\%$ , Ceramic	1	
C90	ECKE1H682MD	0.0068 $\mu$ F, 50WV, $\pm 20\%$ , Ceramic	1	
C91	ECKE1H152MD	0.0015 $\mu$ F, 50WV, $\pm 20\%$ , Ceramic	1	
C92	<b>ECEA50ZR47B</b>	0.47 $\mu$ F, 50WV, Electrolytic	1	
C93	ECFVD333MDY	0.033 $\mu$ F, 25WV, $\pm 20\%$ , Semi-Conductor	1	
C94	<b>ECEA6V470</b>	470 $\mu$ F, 6.3WV, Electrolytic	1	
C95	ECKT1H103MD	0.01 $\mu$ F, 50WV, $\pm 20\%$ , Ceramic	1	
C96	<b>ECEA50ZR47</b>	0.47 $\mu$ F, 50WV, Electrolytic	1	
C97	ECEA50ZR47B	0.47 $\mu$ F, 50WV, Electrolytic	1	
C98	ECEA6V47B	47 $\mu$ F, 6.3WV, Electrolytic	1	
C99	ECKT1H103MD	0.01 $\mu$ F, 50WV, $\pm 20\%$ , Ceramic	1	
C100	ECFTD223MDY	0.022 $\mu$ F, 25WV, $\pm 20\%$ , Semi-Conductor	1	
C101	ECFVD223MDY	0.022 $\mu$ F, 25WV, $\pm 20\%$ , Semi-Conductor	1	
C102	ECEA50ZR1B	0.1 $\mu$ F, 50WV, Electrolytic	1	
C103	<b>ECEA10V2200</b>	2200 $\mu$ F, 10WV, Electrolytic	1	
C104	<b>ECEA6V470</b>	470 $\mu$ F, 6.3WV, Electrolytic	1	
C105	<b>ECEA16V10</b>	10 $\mu$ F, 16WV, Electrolytic	1	
C106	ECEA6V47B	47 $\mu$ F, 6.3WV, Electrolytic	1	
C108	ECKE1H103PF	0.01 $\mu$ F, 50WV, $\pm 10\%$ , Ceramic	1	
C110	ECKE1H103MD	0.01 $\mu$ F, 50WV, $\pm 20\%$ , Ceramic	1	
C111	ECCT1H181K	180PF, 50WV, $\pm 10\%$ , Ceramic	1	
C112	ECCD1H181K	180PF, 50WV, $\pm 10\%$ , Ceramic	1	
C113	ECKD1H102MDA	0.001 $\mu$ F, 50WV, $\pm 20\%$ , Ceramic	1	
C114	ECFVD103MDY	0.01 $\mu$ F, 25WV, $\pm 20\%$ , Semi-Conductor	1	
C115	ECCD1H101K	100PF, 50WV, $\pm 10\%$ , Ceramic	1	
C116	ECKE1H223MD	0.022 $\mu$ F, 50WV, $\pm 20\%$ , Ceramic	1	
C117	ECKT1H103MD	0.01 $\mu$ F, 50WV, $\pm 20\%$ , Ceramic	1	
C125	ECCD1H331K	330PF, 50WV, $\pm 10\%$ , Ceramic	1	
C126	ECKE1H103MD	0.01 $\mu$ F, 50WV, $\pm 20\%$ , Ceramic	1	
C127	ECKE1H103PF	0.01 $\mu$ F, 50WV, $\pm 10\%$ , Ceramic	1	
C128	ECFVD103MDY	0.01 $\mu$ F, 25WV, $\pm 20\%$ , Semi-Conductor	1	
C129	ECKD1H102PF	0.001 $\mu$ F, 50WV, $\pm 10\%$ , Ceramic	1	

Ref. No.	Part No.	Part Name & Description	Per Set	Remarks
C130	<b>ECKD2H103PE</b>	0.01 $\mu$ F, 100WV, $\pm 10\%$ , Ceramic	1	
C131	<b>ECEA16V10</b>	10 $\mu$ F, 16WV, Electrolytic	1	
C133	<b>ECKE1H103MD</b>	0.01 $\mu$ F, 50WV, $\pm 20\%$ , Ceramic	1	
C135	ECCD1H331K	330PF, 50WV, $\pm 10\%$ , Ceramic	1	
C140	ECQG05473MZ	0.047 $\mu$ F, 50WV, $\pm 20\%$ , Polyester	1	
C141	ECCD1H331K	330PF, 50WV, $\pm 10\%$ , Ceramic	1	
C142	ECCD1H101K	100PF, 50WV, $\pm 10\%$ , Ceramic	1	
C143	ECCD1H103MD	0.01PF, 50WV, $\pm 10\%$ , Ceramic	1	
C144	ECKE1H102MD	0.001 $\mu$ F, 50WV, $\pm 20\%$ , Ceramic	1	
C145	ECCD1H331K	330PF, 50WV, $\pm 10\%$ , Ceramic	1	
C146	ECCD1H331K	330PF, 50WV, $\pm 10\%$ , Ceramic	1	
C147	ECKD2H103PE	0.01 $\mu$ F, 100WV, $\pm 10\%$ , Ceramic	1	
C148	ECKD2H103PE	0.01 $\mu$ F, 100WV, $\pm 10\%$ , Ceramic	1	
C149	ECKE1H103MD	0.01 $\mu$ F, 50WV, $\pm 20\%$ , Ceramic	1	
C150	ECKE1H103MD	0.01 $\mu$ F, 50WV, $\pm 20\%$ , Ceramic	1	
C151	ECKE1H103MD	0.01 $\mu$ F, 50WV, $\pm 20\%$ , Ceramic	1	
C152	ECQG05473MZ	0.047 $\mu$ F, 50WV, $\pm 20\%$ , Polyester	1	
C160	ECCD1H120KC	12PF, 50WV, $\pm 10\%$ , Ceramic	1	
C161	ECKE1H103MD	0.01 $\mu$ F, 50WV, $\pm 20\%$ , Ceramic	1	
C162	ECCD1H050CC	5PF, 50WV, $\pm 0.25$ PF, Ceramic	1	
C163	ECCD1H040C	4PF, 50WV, $\pm 0.25$ PF, Ceramic	1	
C165	ECKD1H102MDA	0.001 $\mu$ F, 50WV, $\pm 20\%$ , Ceramic	1	
C166	ECKE1H103MD	0.01 $\mu$ F, 50WV, $\pm 20\%$ , Ceramic	1	
C167	<b>ECEA16V33</b>	33 $\mu$ F, 16WV, Electrolytic	1	
C168	ECCD1H120KC	12PF, 50WV, $\pm 10\%$ , Ceramic	1	
C169	<b>ECEA6V220</b>	220 $\mu$ F, 6.3WV, Electrolytic	1	

**CABINET**

CA1	RYMF1115M RKY118Z RYFF1115M	Cabinet Assembly Handle Cabinet Back Cover Assembly	1	O
CA2	RJC603Z	Terminal Spring, Battery ⊖ Side	2	O
CA3	RJC205B	Terminal, Battery ⊕ Side	2	O
CA4	RKK112Z	Cover, Battery Compartment	1	O
CA5	XEARR174GDSN	Telescopic Antenna, 7 Steps, 1080mm	1	O
CA6	RBN358Z	Knob, Tone & Volume	2	O
CA7	RBN359Z	Knob, Tuning	1	O
CA8	RBS106Z XTB3+45BFN	Knob, Band & Squelch Screw, Cabinet Back Cover M'tg	2	O
CA9	RJJ10C	Jack, Loop Antenna	1	O

**CHASSIS**

CH1	RYDF1115M RDZ051-1 RKD403Y RDS4062Z	Dial Assembly Cord(500m), Dial Scale, Dial Spring, Dial	1Roll	O
CH3	RXEF1115M	Indicating Plate Assembly	1	O
CH4	XAMR57S150	Pilot Lamp, Dial	1	O
CH5	RSM2612Z-K RJJ29Z-H RJJ87Y-C	Meter, Tune & Batt. Jack, AC IN Jack, Earphone & Rec. Out	2	O

Ref. No.	Part No.	Part Name & Description	Per Set	Remarks	
CH6	RUV321Y XSN26+6 XYN26+C5 RGX769Z	Cover, AC Jack Screw, Tuning Capacitor Screw, Tuner M'tg Indicator, Band	1 2 3 1	O	
<b>ACCESSORIES</b>					
A1 A1	RJA22A RJA22B	Power Cord, AC (For U.S.A.) Power Cord, AC (For Canada)	1 1		
A2	XEH1A1-P RSA904Z UM-2DE-(P)	Magnetic Earphone UHF Antenna Battery	1 1 4	O	
A3 A3	RQX6023Z RQX6024Z	Instruction Book, For U.S.A. Instruction Book, For Canada	1 1	O O	

B1

TR1	TR2	TR3	TR4	TR5	TR6	TR7	TR8	TR9	TR10
UHF	UHF	UHF	PSB	PSB	FM	FM	AM	SQUELCH	
C 3.8V	C 3.8V	C 0V	C 0.32V	C 4V	C 0.36V	C 0V	B 1.14V	Normal	0.76V
B —	B —	B 1.57V	B 0.1V	B 1.6V	B 0.06V	B 2.8V	E 0.66V	Max	1.08V
E —	E —	E 2.8V	E 1.4V	E 0.76V	E 0.76V	E 4.4V	E 4.8V		1.4V
Ie 1.5mA	Ie 0.8mA	Ie 1.1mA	Ie 6mA		1.1V				

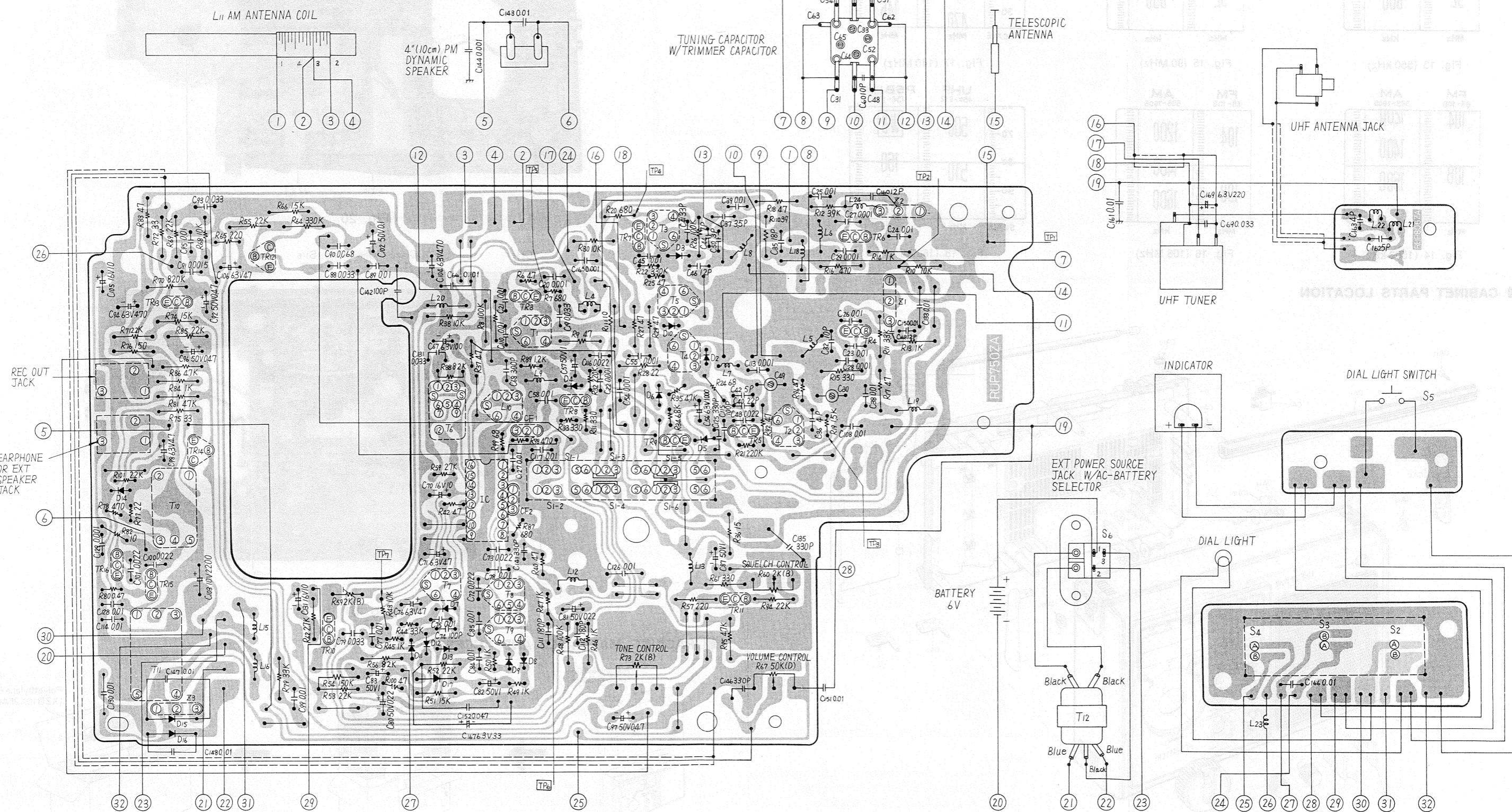
B2

## Circuit Board Wiring View - Model RF-1115

TR6	TR7	TR8	TR9	TR10
FM	FM	AM	C 0.76V	SQUELCH
C 0.36V	C 0V	B 4V	B 1.14V	Normal
B 0.06V	B 2.8V	E 4.4V	E 0.66V	Max
E 3.5V	E 3.7V	Ie 4.8V	E 4.8V	
Ie 0.8mA	Ie 1.1mA	Ie 6mA	Ie 0.7mA	
				5V — 4.9V

B3

TR11	TR12	TR13	TR14	TR15, 16	IC
C 1.08V	C 1.4V	C 1.1V	C 6V	C 6V	FM AM FM AM
B 3.8V	B 0.56V	B 3.6V	B 0.62V	B 0.01V	1 0V 4.6V 7 4.4V 0V 13 0V 4.5V
E 4V	E 0.04V	E 3.9V	E 0.01V	Ie 21mA	2 0.6V 0V 8 3.3V 0V 14 0V 0.68V
Ie 0.6mA	Ie 1.2mA	Ie 8mA	Ie 21mA		3 0V 0V 9 0V 0V 15 0V 4.6V
					4 2.85V 0V 10 0V 0.72V 16 0V 4.6V
					5 3.3V 0V 11 0V 4.5V
					6 4.4V 0V 12 0V 4.6V



TR D & IC	TR16 D14	TR15 D15 D16	TR13 TR14	TR12	TR10	D11 D12 D13 D7 D17 IC	D9 D8 TR3	TR8 D4	TR7	D6 D10 D3 TR9 D5 D2 TR11 TR5	TR6 TR4	T12	L23	L22 L21
T & L	T11 T10	L15 L16 L11	T7 T6	L20 L10 T8	T9 T1 L9 L12	L4	T3 T5 T4 L13	L7 L8	T2	L18 L5 L6	L24 L19			

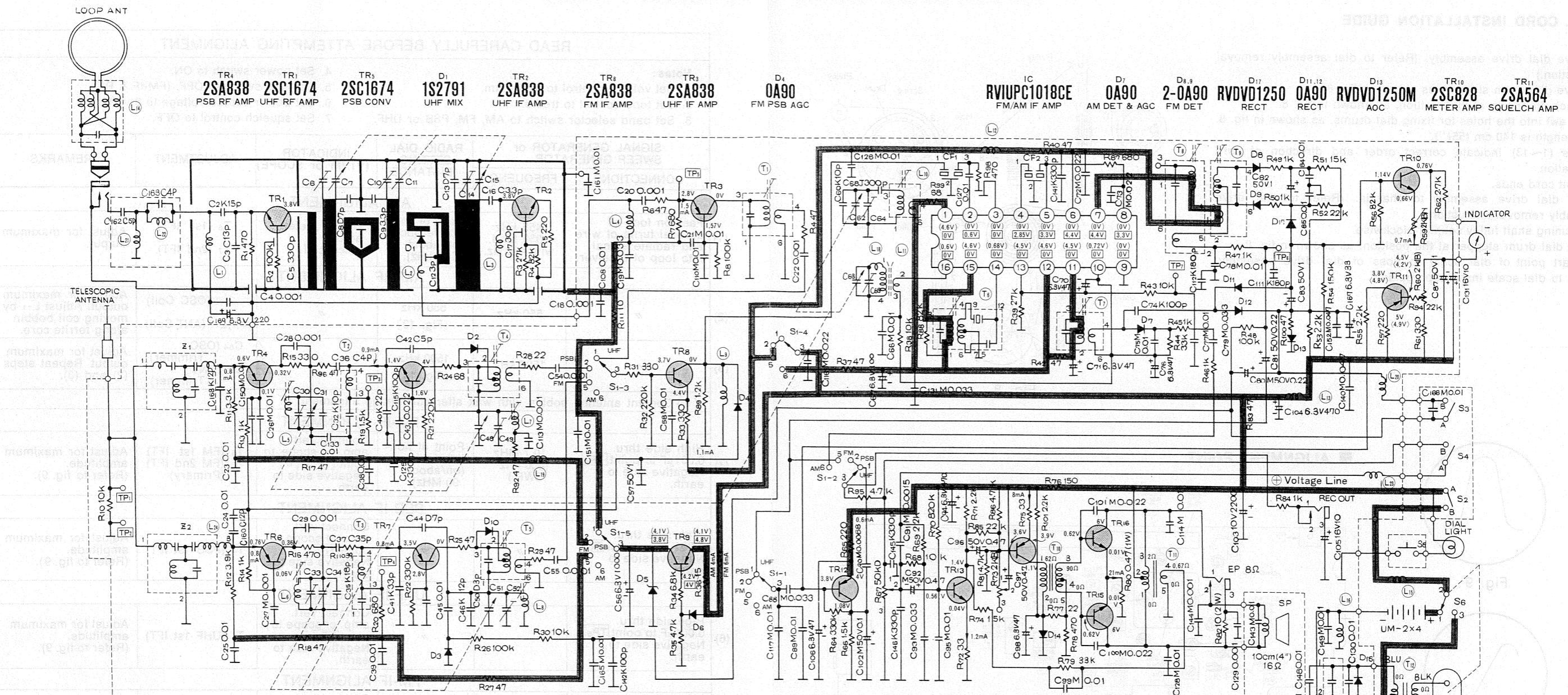
D1

D2

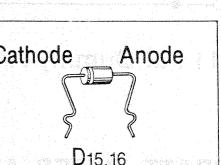
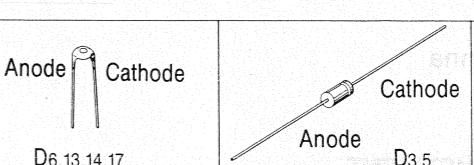
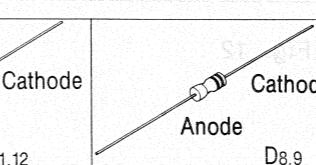
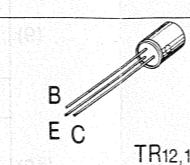
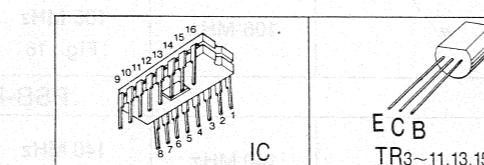
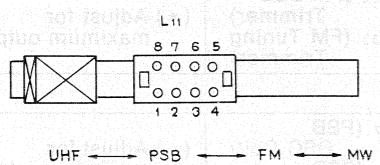
D3

D4

RF-1115/C



C	163 1	162 2 69 3 150 4 5	133 6 7 125 8 9 10 11	12 115 13 14 15 16	17 18 161 151 165 108 19 20	21 110	126 22 116 60	62 63 64 65 66 67 68 127	70 71 141 72 73 74 75 76 77 78 79 112 80 81 111 82 83 84 85 140	87 131	
	168 169 160 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46	48 49 113 50 51 52 54 55 142 56 57 58			117 88 89	106 146 145 90 102 91 92 93 94 95 96 97 98	99 100 101	128 114 144	103 129 143 104 152 147 148 149 105	166	
R	1	2	3 4 6	111	6 7 8	9	37	38 99 88 98	39 101 40 42	87 43 44 45 46 47 48 100 43 50 51 52 53 54 55 56 57	59 60 61 62
	10	11 12 13 14	15 16 17 18	96 110 19 20 21 22	24 25 26 27 92	28 29 30	31 32	33 34 35 36 89	64 95 65 66 67 68 69 70 71 72 73 74 81 85 86 75 76 77 78 79 101 80	82 83 84	



### Note

1. S<sub>1-1</sub>～S<sub>1-6</sub>: Band switch in "UHF" position.
2. S<sub>2</sub>: Power switch in "OFF" position.
3. S<sub>3</sub>: AFC switch in "ON" position.
4. S<sub>4</sub>: Loudness switch in "OFF" position.
5. S<sub>5</sub>: Dial light switch in "OFF" position.
6. S<sub>6</sub>: AC-battery selector in "Battery" position.
7. DC voltage measurements are taken with circuit tester 10kΩ/V from negative terminal of battery.

TR<sub>1, 2, 3</sub>.....UHF position TR<sub>4, 5</sub>.....PSB position  
TR<sub>6, 7, 8</sub>.....FM position .....FM position

( ).....AM position

< >.....Squelch max position

## 8. Battery current: No signal

Maximum output ..... 650mA

**—IMPORTANT SAFETY NOTICE—**

THE SHADED AREA ON THIS SCHEMATIC DIAGRAM INCORPORATES SPECIAL FEATURES IMPORTANT FOR SAFETY.

WHEN SERVICING IT IS ESSENTIAL THAT ONLY MANUFACTURER'S SPECIFIED PARTS BE USED FOR THE CRITICAL COMPONENTS IN THE SHADED AREAS OF THE SCHEMATIC.

# Verfilmungsplan

**Fiche Nr. 1223**

Nach DIN 19054 ( International, NMA-Standart )  
98 Nutzenseiten DIN A4 ( 49 Nutzenseiten DIN A3 )

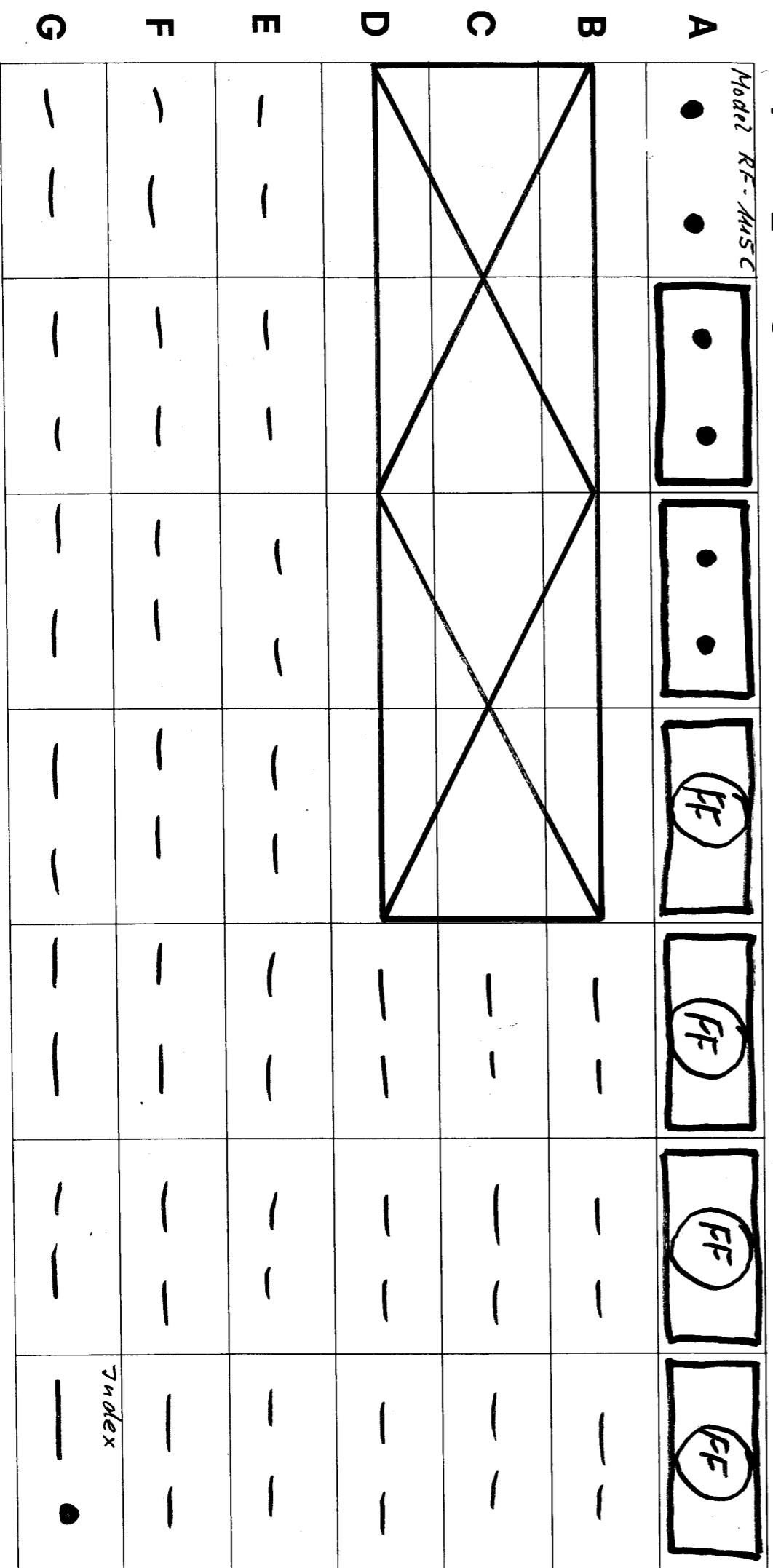
# Datum

23. JULI 19

# Inhalt

Model RF-1115 C

-mdu-Eiche=Organisation=Form 310



## Zeichenerklärung:

LeerFrame

Leer Frame

Information A 4

Information A3 / A4 quer

○

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Farbe der Kopfzeile.....  
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A 5=.....	C10=.....	F 1=.....
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A 7=.....	C12=.....	F 3=.....
A 8=.....	C13=.....	F 4=.....
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Zubehör.

S/M. Order No. RD-7609-1305

S/M. Best. Nr. RD-7609-1305